INCH-POUND

MIL-PRF-49471/4A(CR)
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Superseding
MIL-PRF-49471/4(ER)
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PERFORMANCE SPECIFICATION SHEET

BATTERY, NON-RECHARGEABLE, HIGH PERFORMANCE, BA-X567/U

This specification is approved for use within the Communications Electronics Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product herein shall consist of this specification and MIL-PRF-49471(CR).

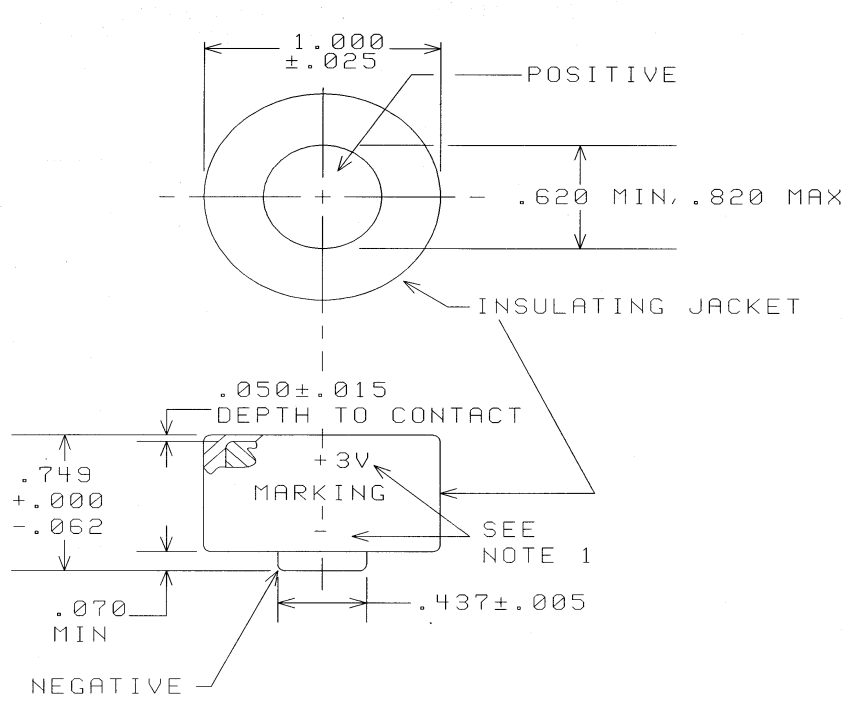

Figure 1. Battery dimensions and terminal markings.

NOTES:

1. Terminal polarity and voltage to be marked on the battery.

2. All dimensions are in inches.

REQUIREMENTS:

Dimensions and configurations: See Figure 1.

Maximum voltage: 3.30 volts.

Cut-off voltage (for capacity): 2.00 volts.

Terminals: See Figure 1.

Weight (maximum): 1.1 ounces (31 grams)

Charge protection: Not applicable

Battery short circuit test: Not applicable.

High temperature protection: Not applicable.

Complete discharge device: Not applicable.

State of Charge Indicator: Not applicable

Capacity tests: When the battery is tested in accordance with the methods of examination and tests of this specification, the minimum capacity test requirements shall be as specified below.

Capacity Tests	Minimum Capacity in Hours to 2.00 Volts
I	18
L	10
H	18
HT	16
LT	10
IT	17

Initial voltage delay: When the battery is subjected to the I, H, HT, and IT capacity tests, initial closed-circuit voltages below 2.00 volts cannot exceed a 5.0 second duration. For the L and LT

capacity tests initial closed-circuit voltages below 2.00 volts cannot exceed a 10.0 second duration.

Negative Terminal Insulation: The negative terminal shall be electrically insulated from a flat surface placed against the side of the battery (the 0.749 inch dimension) even when the battery is not parallel to the surface.

METHOD OF EXAMINATION AND TESTS:

Capacity tests:

(1) Storage: Details on storage conditions for all specified capacity tests are described in basic specification.

(2) Discharge: Discharge current for all capacity tests shall be 50 milliamperes constant current. All samples shall be discharged to cut-off voltage except for the I test; I test samples shall be discharged to zero volts, then force discharged at 50 milliamperes for a minimum of 5 minutes.

Abuse test predischarge: Designated samples shall be discharged at 50 milliamperes for 9 hours.

Abuse test, pulse discharge: Batteries shall be discharged at 55 milliamperes for 1 minute followed by 40 milliamperes for four minutes, cycled continuously to cut-off voltage.

(3) Cell Forced Discharge: Two cells shall be discharged at 50 milliamperes at 70$\pm$5°F to 2.0 volts. Each discharged cell shall then be connected in series with one fresh cell. Each string shall be discharged at 50 milliamperes at 70$\pm$5°F for 18 hours.

Closed-circuit voltage (Batteries and cells): Load resistance of 20 ohms shall be used. Voltage shall be above 2.0 volts within five seconds.

Negative Terminal Insulation: When a ten pound force is applied across the battery diameter, no electrical contact shall be made even if the maximum angle between the battery surface and the contact surface is 15°. The contact surface to be used in the test shall be a flat iron or steel plate measuring 3/4" x 3/4". Its thickness shall be 1/8". These dimensions are all minimums.

The lack of electrical contact shall be demonstrated with a voltmeter set so that 3.00 volts is readily evident. During the test, one terminal of the voltmeter shall be attached to the positive terminal of the battery and the other terminal of the voltmeter attached to the reverse side of the contact surface. Zero volts shall be read.

Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodian:
Army - CR

Preparing Activity:
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